

AMENDMENTS TO THE CLAIMS

Claim 1 (Cancelled)

2. (Previously Amended) The electrostatic chucking system according to claim 6, further comprising a temperature sensor for detecting the temperature of the semiconductor substrate held by said electrostatic chuck, wherein a signal output from said temperature sensor is input to said voltage control section to thereby control the applied voltage.

3. (Currently Amended) An electrostatic chucking system comprising:
an electrostatic chuck having an electrode for chucking a semiconductor substrate;
a power supply section for applying a voltage to said electrode;
a voltage control section for controlling the applied voltage; and
a warpage sensor for detecting the amount of warpage arising in the semiconductor substrate held by said electrostatic chuck, wherein a signal output from said warpage sensor is input to said voltage control section to thereby control the applied voltage, wherein
said voltage control section varies and controls the applied voltage stepwise based upon said signal output from said warpage sensor, and the control of the applied voltage by said voltage control section occurs contemporaneously with input of said signal output to said voltage control section by said warpage sensor.

4. (Previously Amended) An electrostatic chucking system comprising:
an electrostatic chuck having an electrode for chucking a semiconductor substrate;
a power supply section for applying a voltage to said electrode;
a voltage control section for controlling the applied voltage; and
a distance sensor for detecting the distance between said electrostatic chuck and the semiconductor substrate held by said electrostatic chuck, wherein a signal output from said distance sensor is input to said voltage control section to thereby control the applied voltage, wherein

said voltage control section varies and controls the applied voltage stepwise based upon said signal output from said distance sensor,

5. (Previously Amended) The electrostatic chucking system according to claim 6, wherein the control of variation in the applied voltage involves either increase or decrease in voltage.

6. (Previously Amended) An electrostatic chucking system comprising:
an electrostatic chuck having an electrode for chucking a semiconductor substrate;
a power supply section for applying a voltage to said electrode; and
a voltage control section for controlling the applied voltage, wherein
said voltage control section varies and controls the applied voltage stepwise, and wherein
the applied voltage is controlled such that a rate at which the temperature change of the semiconductor substrate falls with a range of 10°C/sec. to 150°C/sec.

7. (Previously Amended) A method of manufacturing a semiconductor device comprising a step of treating a semiconductor wafer through use of the electrostatic system according to claim 6.

8. (Previously Amended) An apparatus for manufacturing a semiconductor device, said apparatus comprising the electrostatic system according to claim 6.
